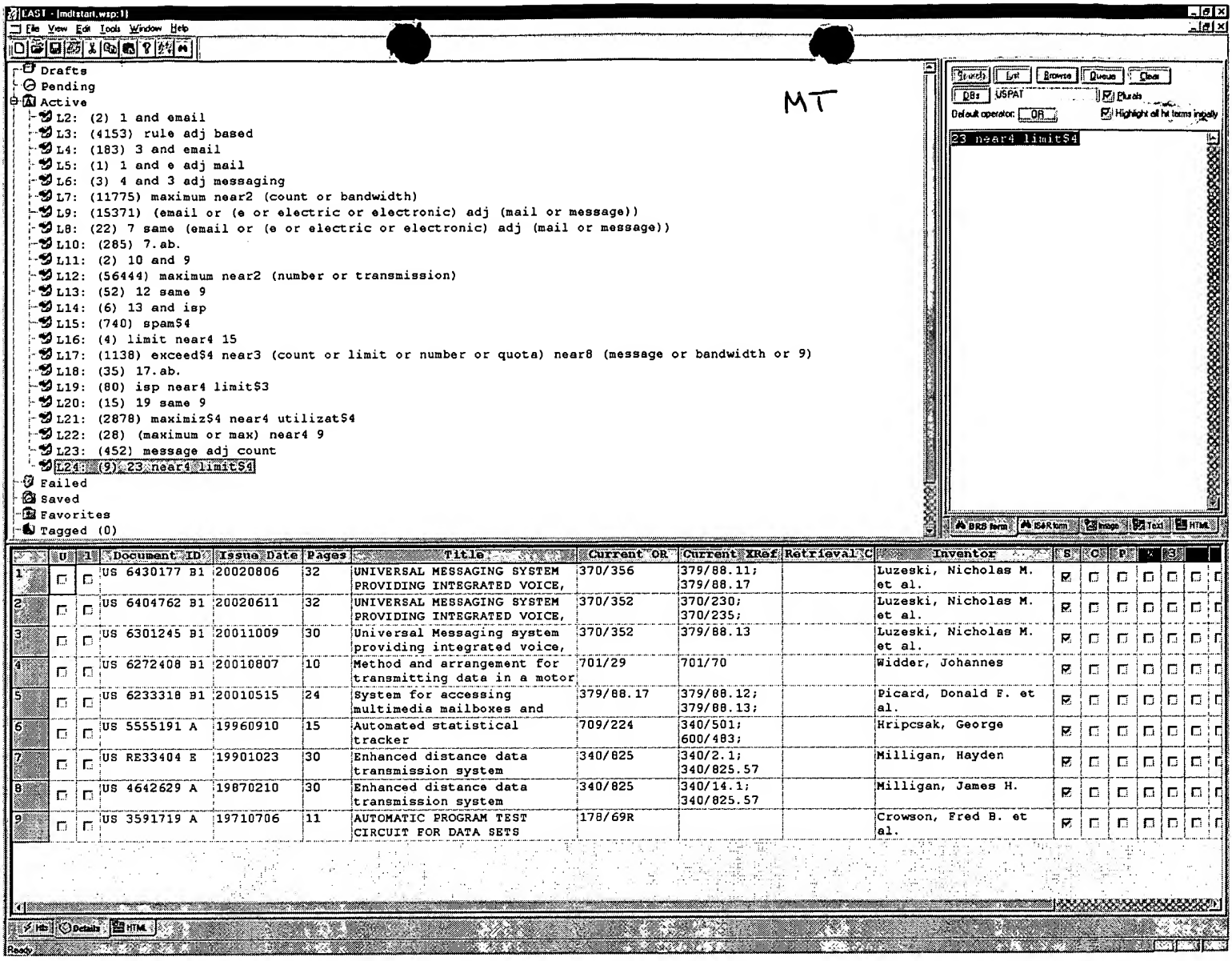


	U	1	Document ID	Issue Date	Pages	Title	Current OR	Current XRef	Retrieval C	Inventor	S	O	P				
1	☐	☐	US 6430177 B1	20020806	32	UNIVERSAL MESSAGING SYSTEM PROVIDING INTEGRATED VOICE,	370/356	379/88.11; 379/88.17		Luzeski, Nicholas M. et al.	☑	☐	☐	☐	☐	☐	☐
2	☐	☐	US 6404762 B1	20020611	32	UNIVERSAL MESSAGING SYSTEM PROVIDING INTEGRATED VOICE,	370/352	370/230; 370/235;		Luzeski, Nicholas M. et al.	☑	☐	☐	☐	☐	☐	☐
3	☐	☐	US 6301245 B1	20011009	30	Universal Messaging system providing integrated voice,	370/352	379/88.13		Luzeski, Nicholas M. et al.	☑	☐	☐	☐	☐	☐	☐
4	☐	☐	US 6272408 B1	20010807	10	Method and arrangement for transmitting data in a motor	701/29	701/70		Widder, Johannes	☑	☐	☐	☐	☐	☐	☐
5	☐	☐	US 6233318 B1	20010515	24	System for accessing multimedia mailboxes and	379/88.17	379/88.12; 379/88.13;		Picard, Donald F. et al.	☑	☐	☐	☐	☐	☐	☐
6	☐	☐	US 5555191 A	19960910	15	Automated statistical tracker	709/224	340/501; 600/483;		Hripcsak, George	☑	☐	☐	☐	☐	☐	☐
7	☐	☐	US RE33404 E	19901023	30	Enhanced distance data transmission system	340/825	340/2.1; 340/825.57		Milligan, Hayden	☑	☐	☐	☐	☐	☐	☐
8	☐	☐	US 4642629 A	19870210	30	Enhanced distance data transmission system	340/825	340/14.1; 340/825.57		Milligan, James H.	☑	☐	☐	☐	☐	☐	☐
9	☐	☐	US 3591719 A	19710706	11	AUTOMATIC PROGRAM TEST CIRCUIT FOR DATA SETS	178/69R			Crowson, Fred B. et al.	☑	☐	☐	☐	☐	☐	☐

[54] **DISTRIBUTION LIMITER FOR NETWORK MESSAGING**

[75] Inventors: **Craig K. Poulton**, Salt Lake City; **Luke A. Call**, Tooele, both of Utah

[73] Assignee: **Paratran Corporation**, Salt Lake City, Utah

[21] Appl. No.: 09/040,907

[22] Filed: Mar. 18, 1998

Related U.S. Application Data

[60] Provisional application No. 60/039,341, Mar. 18, 1997.

[51] Int. Cl.[7] G06F 13/38; G06F 15/17

[52] U.S. Cl. 709/206; 709/217; 709/226; 709/213; 709/245; 709/218; 707/10; 707/206; 364/478.14

[58] Field of Search 709/232, 206, 709/238, 245, 219, 249; 380/24, 25, 49

[56] References Cited

U.S. PATENT DOCUMENTS

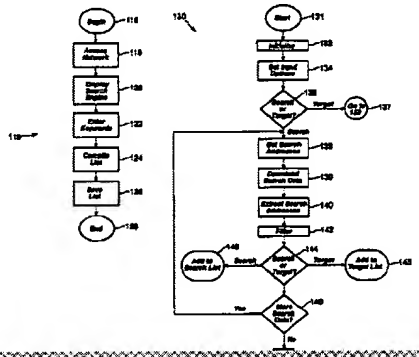
5,377,354	12/1994	Scannell et al.	395/650
5,414,833	5/1995	Hershey et al.	395/575
5,491,820	2/1996	Belove et al.	395/600
5,513,126	4/1996	Harkins et al.	364/514 A
5,537,586	7/1996	Amram et al.	395/600
5,541,911	7/1996	Nilakantan et al.	370/13
5,548,753	8/1996	Linstead et al.	395/600
5,606,668	2/1997	Shwed	395/200.11
5,619,648	4/1997	Canale et al.	395/200.01
5,650,934	7/1997	Mandhley	364/478.08
5,708,655	1/1998	Toth et al.	370/313
5,717,913	2/1998	Driscoll	395/605
5,826,022	10/1998	Neilsen	709/206
5,832,221	11/1998	Jones	709/206
5,864,610	1/1999	Ronen	379/127
5,878,230	3/1999	Weber et al.	709/238
5,884,033	3/1999	Duvall et al.	709/206
5,903,878	5/1999	Talati et al.	705/26
5,928,333	7/1999	Landfield et al.	709/245
5,930,777	6/1999	Barber	705/40
5,936,865	8/1999	Pinsov et al.	364/478.14
5,938,725	8/1999	Hara	709/206
5,940,478	8/1999	Vendreuil et al.	379/88.18
5,943,426	8/1999	Frith et al.	380/25
5,944,787	8/1999	Zoken	709/206
5,956,483	9/1999	Grate et al.	709/203
5,978,842	11/1999	Noble et al.	709/218
5,987,471	11/1999	Bodine et al.	707/103
5,999,967	12/1999	Sundsted	709/206

Primary Examiner—Frank J. Asta
Assistant Examiner—Bunjob Jaroenchonwanit
Attorney, Agent, or Firm—Mason & Metcalf

[57] ABSTRACT

A message distribution limiter computer program and method are provided. The method preferably includes receiving a site address of target data stored at a remote site on a computer network; locating the target data stored at the remote site; examining the target data to determine if user addresses are present in the target data; extracting user addresses from the target data; and compiling a database containing the extracted user addresses. The method also preferably includes the steps of downloading the target data to a local memory; locating within the target data one or more embedded site addresses of remote sites on the computer network for locating additional target data referenced within the remote sites; screening the embedded site addresses according to a user-selectable criterion; and screening the target data according to a user-selectable criterion such that user addresses are extracted only from target data meeting the selected criterion. Also included is a mail screening module adapted to place into a network site a user-selectable code indicating whether a selected type of message is desired to be received by a mailbox within the network site.

20 Claims, 6 Drawing Sheets



	Document ID	Pag	Current	Current XR	S	PT
1	US 6484197	8	709/206	709/207	☑	☐ ☐
2	US 6249805	9	709/206	707/10;	☑	☐ ☐
3	US 6161130	27	709/206	707/5;	☑	☐ ☐
4	US 6073167	15	709/206	700/226;	☑	☐ ☐

(12) United States Patent
Kirsch

(10) Patent No.: US 6,546,416 B1
(45) Date of Patent: Apr. 8, 2003

(54) METHOD AND SYSTEM FOR SELECTIVELY BLOCKING DELIVERY OF BULK ELECTRONIC MAIL

(75) Inventor: Steven T. Kirsch, Los Altos, CA (US)

(73) Assignee: Infoseek Corporation, Burbank, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/208,330

(22) Filed: Dec. 9, 1998

(51) Int. Cl.[7] G06F 13/00

(52) U.S. Cl. 709/206; 709/219; 709/225; 713/201

(58) Field of Search 709/203, 204, 709/206, 219, 223, 224, 225, 313; 713/201

(56) References Cited

U.S. PATENT DOCUMENTS

5,619,648	A *	4/1997	Canale et al.	709/206
5,796,840	A *	8/1998	Davis	380/50
6,023,723	A *	2/2000	McCormick et al.	709/206
6,052,709	A *	4/2000	Paul	709/202
6,195,698	B1 *	2/2001	Lillibridge et al.	709/225
6,199,102	B1 *	3/2001	Cobb	709/206
6,266,692	B1 *	7/2001	Greenstein	709/206
6,324,650	B1 *	11/2001	Ogilvie	713/202

FOREIGN PATENT DOCUMENTS

WO	WO 99/10817 *	4/1999	G06F/17/00

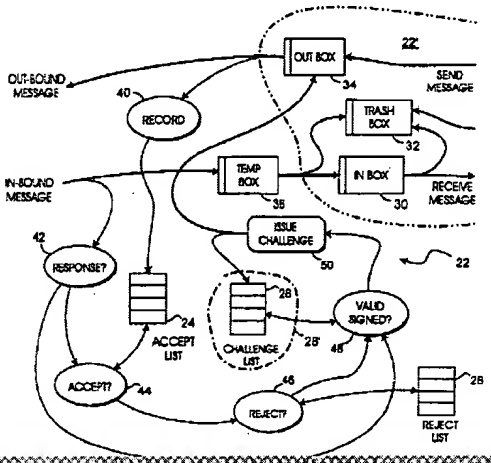
* cited by examiner

Primary Examiner—Viet D. Vu
(74) *Attorney, Agent, or Firm*—David E. Lovejoy; Donald L. Wenskay

(57) ABSTRACT

The origin address of an e-mail message is validated to enable blocking of e-mail from spam e-mail sources, by preparing, in response to the receipt of a predetermined e-mail message from an unverified source address, a data key encoding information reflective of the predetermined e-mail message. This message, including the data key, is then issued to the unverified source address. The computer system then operates to detect whether a response e-mail message, responsive to the challenge e-mail message, is received and whether the response e-mail message includes a response key encoding predetermined information reflective of a predetermined aspect of the challenge e-mail message. The unverified source address may be recorded in a verified source address list. Thus, when an e-mail message is received, the computer may operate to accept receipt of a predetermined e-mail message on condition that the source address of the predetermined e-mail message is recorded in the verified source address list and alternatively on condition that the predetermined e-mail message includes the response key.

24 Claims, 4 Drawing Sheets



	Document ID	Pag	Current	Current XR	S		PT
1	US 6654779	14	718/101	709/206;	☑	☐	☐
2	US 6546416	13	709/206	709/219;	☑	☐	☐
3	US 6480893	17	709/226	709/229	☐	☐	☐
4	US 6442593	12	709/206	709/207	☐	☐	☐
5	US 6438583	40	709/206	705/1;	☐	☐	☐
6	US 6424828	19	455/412	379/9.01;	☐	☐	☐
7	US 6381634	8	709/206	709/217;	☐	☐	☐
8	US 6370580	18	709/226	709/229	☐	☐	☐
9	US 6314454	18	709/206	358/402;	☐	☐	☐
10	US 6295058	17	345/769	345/724;	☐	☐	☐
11	US 6216165	14	709/232	709/203;	☐	☐	☐
12	US 6115817	10	713/171	380/28;	☐	☐	☐
13	US 5995597	14	379/93.	379/88.15	☐	☐	☐
14	US 5991809	15	709/226	709/229	☐	☐	☐
15	US 5951644	16	709/229	370/229;	☐	☐	☐

[54] **SYSTEM FOR PREDICTING AND MANAGING NETWORK PERFORMANCE BY MANAGING AND MONITORING RESOURSE UTILIZATION AND CONNECTION OF NETWORK**

[75] Inventor: **David Z. Creemer**, Palo Alto, Calif.

[73] Assignee: **Apple Computer, Inc.**, Cupertino, Calif.

[21] Appl. No.: **08/778,042**

[22] Filed: **Dec. 24, 1996**

[51] Int. Cl.[6] G06F 13/14; G06F 15/173

[52] U.S. Cl. 709/229; 709/227; 709/223; 370/229; 370/230

[58] Field of Search 395/674, 200.8, 395/200.55, 200.53, 200.65, 500; 379/230; 370/232, 229, 230; 709/229, 227, 223

[56] References Cited

U.S. PATENT DOCUMENTS

3,916,383	10/1975	Malcolm .	
5,541,987	7/1996	Topper et al.	379/230
5,633,861	5/1997	Hanson et al.	370/232
5,673,253	9/1997	Shaffer	370/229
5,727,149	3/1998	Hirata et al. .	
5,745,694	4/1998	Egawa et al. .	
5,751,963	5/1998	Umetsu .	
5,751,969	5/1998	Kapoor .	
5,754,831	5/1998	Berman	395/500

OTHER PUBLICATIONS

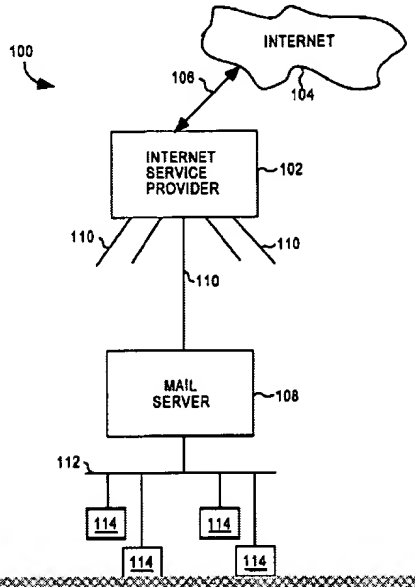
Intercall UUCP Gateway Manual, "Quick Mail: Your Complete Messaging Solution," CE Software, Inc., 1995, ch.1 pp. 1–36.

Primary Examiner—Krisna Lim
Attorney, Agent, or Firm—Beyer & Weaver, LLP

[57] **ABSTRACT**

A system to manage network resources of a network so that network performance is predictable and manageable is disclosed. According to the system, network resource utilization is monitored and then computer systems seeking to transmit or receive data over the network as requested to do so at times that serve to more efficiently utilize the network resources. A method for managing network resources is also disclosed.

16 Claims, 7 Drawing Sheets



	Document ID	Pag	Current	Current XR	S	PT
1	US 6654779	14	718/101	709/206;	☑	☐
2	US 6546416	13	709/206	709/219;	☑	☐
3	US 6480893	17	709/226	709/229	☑	☐
4	US 6442593	12	709/206	709/207	☑	☐
5	US 6438583	40	709/206	705/1;	☑	☐
6	US 6424828	19	455/412	379/9.01;	☑	☐
7	US 6381634	8	709/206	709/217;	☑	☐
8	US 6370580	18	709/226	709/229	☑	☐
9	US 6314454	18	709/206	358/402;	☑	☐
10	US 6295058	17	345/769	345/724;	☑	☐
11	US 6216165	14	709/232	709/203;	☑	☐
12	US 6115817	10	713/171	380/28;	☑	☐
13	US 5995597	14	379/93.	379/88.15	☑	☐
14	US 5991809	15	709/226	709/229	☑	☐
15	US 5951644	16	709/229	370/229;	☑	☐

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             OR MESSAG?) OR SMTP OR MIME OR POP
S2    3788810   (MAX OR MAXIMUM OR THRESHOLD OR MOST)(2N)(NUMBER? OR AMOUN-
             T?) OR QUOTA OR LIMIT OR THRESHOLD OR MOST
S3       2900   SPAM OR ANTISPAM OR BULK(2N)(REMAIL? OR MAIL?)
S4       6613   S1 AND S2
S5         88   S4 AND S3
S6        322   S4 AND ((EMAIL OR MAIL)()SERVER? OR SENDER? OR ISP OR SERV-
             ICE()PROVIDER?)
S7         25   S5 AND S6
S8         24   RD (unique items)
S9         13   S8 NOT PY>2000
S10      2923   UNSOLICIT?(N)(MAIL? OR EMAIL?) OR S3
S11        11   S1(2N)S2 AND S10
S12        32   S1(2N)S2 AND S6
S13        40   S11 OR S12
S14        40   RD (unique items)
S15       594   S3 AND (FILTER? OR RULE?)
S16        48   S15 AND S2
S17        28   S16 AND (ADDRESS? OR INDIVIDUAL? OR SENDER? OR PERSON? OR -
             USER? OR SUBSCRIBER? OR CLIENT?)
S18        65   S14 OR S17
S19        61   S18 NOT S9
S20        61   RD (unique items)
S21        35   S20 NOT PY>2000
S22     24766   (LEVEL? OR QUANTIT? OR NUMBER? OR MAXIMUM? OR LIMIT? OR TH-
             RESHOLD?)(2N)(ADDRESS? OR FORWARD? OR RECIPIENT? OR RECEIVER?)
S23       312   S1 AND S22
S24         6   S23 AND (BULK? OR SPAM? OR REMAIL?)
S25        18   S23 AND (SERVER? OR GATEWAY? OR ISP? OR SERVICE()PROVIDER?)
S26        24   S24 OR S25
S27        24   RD (unique items)
S28        24   S27 NOT (S20 OR S9)
S29        21   S28 NOT PY>2000
S30        77   S3(2N)(PREVENT? OR STOP OR PROHIBIT? OR BLOCK?) AND (SERVE-
             R? OR GATEWAY? OR ISP OR SERVICE()PROVIDER?)
S31        76   RD (unique items)
S32        27   S31 NOT PY>2000
S33        25   S32 NOT (S29 OR S20 OR S9)
S34         7   S33 AND (TRAFFIC? OR NUMBER? OR AMOUNT? OR QUANTIT? OR LIM-
             IT? OR THRESHOLD?)
File   8:Ei Compendex(R) 1970-2004/Feb W5
         (c) 2004 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Feb
         (c) 2004 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2004/Feb 27
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File  65:Inside Conferences 1993-2004/Mar W1
         (c) 2004 BLDSC all rts. reserv.
File   2:INSPEC 1969-2004/Feb W5
         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Feb W5
         (c)2004 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/Mar 11
         (c) 2004 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File   6:NTIS 1964-2004/Mar W1
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2004/Feb W5
         (c) 2004 INIST/CNRS
File  34:SciSearch(R) Cited Ref Sci 1990-2004/Mar W1
         (c) 2004 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Feb
         (c) 2004 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2004/Feb W4
         (c) 2004 FIZ TECHNIK
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34/5/4 (Item 4 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00498339 98OV06-010
Online and Internet service providers **-- Countering spam**
Online & CD-ROM Review , June 1, 1998 , v22 n3 p230-231, 2 Page(s)
ISSN: 0309-314X
Languages: English
Document Type: Articles, News & Columns
Geographic Location: Great Britain

Provides a profile on Internet **Service Providers** , and how they are moving decisively to combat spam on the Internet. Says in addition to imposing hefty fines to spammers, ISPs are now filtering junk mail from their customers accounts on their behalf. Says as a result of the outcome of recent high profile court hearings, Internet Providers have been empowered and are now using a **number** of criteria to impede spammers. Says by **blocking spam** before it reaches the customer's inbox is proving very successful, and is becoming the favored method of combating spam by a growing **number** of ISPs. Adds the mail is blocked at the individual discretion of the **ISP** , and the cost of filtering is not more than the cost of chasing spammers and getting them to refrain from spamming customers. (EB)

Descriptors: Spamming; Electronic Mail; Internet; Internet **Service Providers**

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            OR MESSAG?) OR SMTP OR MIME OR POP
S2   13483983   (MAX OR MAXIMUM OR THRESHOLD OR MOST)(2N)(NUMBER? OR AMOUN-
            T?) OR QUOTA OR LIMIT OR THRESHOLD OR MOST
S3      59560   SPAM OR ANTISPAM OR BULK(2N)(REMAIL? OR MAIL?)
S4      76591   S1 (8N) S2
S5       1599   S4 (8N) S3
S6       1986   S4 (10N) ((EMAIL OR MAIL)()SERVER? OR SENDER? OR ISP OR SE-
            RVICE()PROVIDER?)
S7        120   S4(S)S5(S)S6
S8         62   RD (unique items)
S9         21   S8 NOT PY>2000
S10        19   S9 NOT PD=20001117:20021117
S11        19   S10 NOT PD=20021117:20040401
File 275:Gale Group Computer DB(TM) 1983-2004/Mar 11
         (c) 2004 The Gale Group
File  47:Gale Group Magazine DB(TM) 1959-2004/Mar 11
         (c) 2004 The Gale group
File  75:TGG Management Contents(R) 86-2004/Feb W5
         (c) 2004 The Gale Group
File 636:Gale Group Newsletter DB(TM) 1987-2004/Mar 11
         (c) 2004 The Gale Group
File  16:Gale Group PROMT(R) 1990-2004/Mar 11
         (c) 2004 The Gale Group
File 624:McGraw-Hill Publications 1985-2004/Mar 11
         (c) 2004 McGraw-Hill Co. Inc
File 484:Periodical Abs Plustext 1986-2004/Mar W1
         (c) 2004 ProQuest
File 613:PR Newswire 1999-2004/Mar 11
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File 813:PR Newswire 1987-1999/Apr 30
         (c) 1999 PR Newswire Association Inc
File 141:Readers Guide 1983-2004/Feb
         (c) 2004 The HW Wilson Co
File 696:DIALOG Telecom. Newsletters 1995-2004/Mar 10
         (c) 2004 The Dialog Corp.
File 553:Wilson Bus. Abs. FullText 1982-2004/Feb
         (c) 2004 The HW Wilson Co
File 621:Gale Group New Prod.Annou.(R) 1985-2004/Mar 11
         (c) 2004 The Gale Group
File 674:Computer News Fulltext 1989-2004/Feb W5
         (c) 2004 IDG Communications
File  88:Gale Group Business A.R.T.S. 1976-2004/Mar 10
         (c) 2004 The Gale Group
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 635:Business Dateline(R) 1985-2004/Mar 11
         (c) 2004 ProQuest Info&Learning
File  15:ABI/Inform(R) 1971-2004/Mar 11
         (c) 2004 ProQuest Info&Learning
File   9:Business & Industry(R) Jul/1994-2004/Mar 10
         (c) 2004 Resp. DB Svcs.
File  13:BAMP 2004/Feb W5
         (c) 2004 Resp. DB Svcs.
File 810:Business Wire 1986-1999/Feb 28
         (c) 1999 Business Wire
File 610:Business Wire 1999-2004/Mar 10
         (c) 2004 Business Wire.
File 647:CMP  Computer Fulltext 1988-2004/Feb W5
         (c) 2004 CMP Media, LLC
File  98:General Sci Abs/Full-Text 1984-2004/Feb
         (c) 2004 The HW Wilson Co.
File 148:Gale Group Trade & Industry DB 1976-2004/Mar 05
         (c)2004 The Gale Group
File 634:San Jose Mercury  Jun 1985-2004/Mar 10
         (c) 2004 San Jose Mercury News
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11/3,K/8 (Item 1 from file: 16)
DIALOG(R)File 16:Gale Group PROMT(R)

06202083 Supplier Number: 54142863 (USE FORMAT 7 FOR FULLTEXT)
Spam isn't going away, but simple actions can help stem the tide and support others' efforts.(Technology Information)(Column)
SYMOENS, JEFF
InfoWorld, v21, n11, p76(1)
March 15, 1999
Language: English Record Type: Fulltext
Article Type: Column
Document Type: Magazine/Journal; Trade
Word Count: 860

... enabled, the same spam messages can come to you from a dozen or so different **senders** , meaning users would have to constantly adjust their rules.

Most of the latest crop of **e - mail server** products contain some server- side anti- **spam** capabilities, such as "blacklisting" (address blocking) and restricting access to the server's SMTP relay...

11/3,K/11 (Item 1 from file: 484)

04139362 (USE FORMAT 7 OR 9 FOR FULLTEXT)
Consistent, yet anonymous, Web access with LPWA
Gabber, Eran; Gibbons, Phillip B; Kristol, David M; Matias, Yossi; Mayer, Alain
Communications of the ACM (GACM), v42 n2, p42-47, p.6
Feb 1999
ISSN: 0001-0782 JOURNAL CODE: GACM
DOCUMENT TYPE: Feature
LANGUAGE: English RECORD TYPE: Fulltext; Abstract
WORD COUNT: 3724

TEXT:
... email caused by the selling of the database to spammers, while at the same time **email** from all other sites is unaffected. **Most** current anti- **spam** tools filter according to **sender** addresses or keywords, both of which are easily changed by spammers (such as address spoofing...

11/3,K/18 (Item 1 from file: 148)
DIALOG(R)File 148:Gale Group Trade & Industry DB

11913460 SUPPLIER NUMBER: 61202550 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Scamming The Scammers.(Brief Article)
DORGAN, WILLIAM J.
Modern Machine Shop, 72, 10, 132
March, 2000
DOCUMENT TYPE: Brief Article ISSN: 0026-8003 LANGUAGE: English
RECORD TYPE: Fulltext
WORD COUNT: 512 LINE COUNT: 00041

The Federal Trade Commission warns that **most** Internet scams arrive by means of **Bulk E - Mail** . And the accent is on "bulk." There are scammers out there who are willing to...

...providers offer software that automates sending e-mail messages to recipients. Others will even send **bulk** e- **mail** solicitations for you. **Most bulk e - mail** providers insinuate that you can make a huge amount of money using their marketing techniques and "tricks". They neglect to mention that sending **bulk e - mail** violates the "terms of service" (TOS) of **most** Internet **service providers** (ISPs). If you use automated ("robotic") bulk e-mail programs your ISP may terminate your...

```
Set     Items   Description
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             OR MESSAG?) OR SMTP OR MIME OR POP
S2     558805   (MAX OR MAXIMUM OR THRESHOLD OR MOST)(2N)(NUMBER? OR AMOUN-
             T?) OR QUOTA OR LIMIT OR THRESHOLD OR MOST
S3        214   SPAM OR ANTISPAM OR BULK(2N)(REMAIL? OR MAIL?)
S4        795   S1 AND S2
S5          9   S4 AND S3
S6        125   S4 AND ((EMAIL OR MAIL)()SERVER? OR SENDER? OR ISP OR SERV-
             ICE()PROVIDER?)
S7        108   S6 AND IC=G06F?
S8         49   S7 NOT AD>20001117
S9         49   S8 NOT S5
S10        14   S9 AND (RECIPIENT? OR ADDRESS? OR MESSAGES)
S11         1   S9 AND ADDRESSEE?
S12        14   S10 OR S11
S13        78   S7 AND (USER? OR SENDER? OR CLIENT? OR SUBSCRIBER? OR INDI-
             VIDUAL? OR PERSON?)
S14         0   S7 AND EMAILER
S15         6   E()MAILER?
S16       649   MAILER?
S17         0   (S15 OR S16) AND S7
S18        67   S13 NOT S12
S19        63   S18 NOT CHARACTER?
S20        56   S19 NOT SIZE?
S21        51   S20 NOT CAPACIT?
S22        17   S21 NOT AD>20001117
File 347:JAPIO Nov 1976-2003/Nov(Updated 040308)
         (c) 2004 JPO & JAPIO
File 350:Derwent WPIX 1963-2004/UD,UM &UP=200416
         (c) 2004  THOMSON DERWENT
```

5/5/6 **(Item 5 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014823341 **Image available**
WPI Acc No: 2002-644047/200269
XRPX Acc No: N02-509120
Apparatus for detecting spam **in real-time uses program identifying files, origin address or subject and applies frequency or quantity** threshold
Patent Assignee: EARNEST J B (EARN-I); WELLS FARGO BANK NA (WELL-N)
Inventor: EARNEST J B
Number of Countries: 092 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200275570	A1	20020926	WO 2002US7048	A	20020307	200269	B
US 20020184315	A1	20021205	US 2001810158	A	20010316	200301	

Priority Applications (No Type Date): US 2001810158 A 20010316
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200275570	A1	E	45	G06F-015/16	

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

US 20020184315	A1		G06F-015/16

Abstract (Basic): WO 200275570 A1
NOVELTY - System for automatically detecting unwanted messages in real time comprises a redundant **e - mail** address detection and capture system comprising a computer program which has a process for accessing the directory and identifying message files, a process for locating an address of origin, subject or other specified criteria within each message file, a process for identifying whether each message file should be considered **spam** , a process for separating the **spam** and non- **spam** message files logically and a process physically moving or renaming the message files in a predetermined fashion. A frequency or quantity **threshold** is applied to identify **spam** .
DETAILED DESCRIPTION - There are INDEPENDENT CLAIMS for:
(1) A method of automatically detecting unwanted messages in real time as applied to a message router
(2) An apparatus for redundant **e - mail** address detection and capture
USE - Apparatus concerns **e - mail** messaging and **spam** filtering.

ADVANTAGE - Apparatus detects unwanted messages in real time.
DESCRIPTION OF DRAWING(S) - The figure shows a flow diagram of a redundant **e - mail** address detection and capture system.
pp; 45 DwgNo 2/3
Title Terms: APPARATUS; DETECT; **SPAM** ; REAL-TIME; PROGRAM; IDENTIFY; FILE; ORIGIN; ADDRESS; SUBJECT; APPLY; FREQUENCY; QUANTITY; **THRESHOLD**
Derwent Class: T01
International Patent Class (Main): G06F-015/16
International Patent Class (Additional): G06F-013/00; G06F-017/20
File Segment: EPI

5/5/7 **(Item 6 from file: 350)**
DIALOG(R)File 350:Derwent WPIX

014518981
WPI Acc No: 2002-339684/200237
XRPX Acc No: N02-267111

Method for monitoring electronic mail **message by generating from each message a number representing part of the message but not non-subject header information and comparing the numbers with previously stored numbers**

Patent Assignee: CONTENT TECHNOLOGIES LTD (CONT-N); CLEARSWIFT LTD (CLEA-N)
Inventor: HOCKEY A
Number of Countries: 097 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 200219069	A2	20020307	WO 2001GB3852	A	20010829	200237	B
GB 2366706	A	20020313	GB 200021444	A	20000831	200237	
AU 200182359	A	20020313	AU 200182359	A	20010829	200249	
EP 1368719	A2	20031210	EP 2001960974	A	20010829	200382	
			WO 2001GB3852	A	20010829		

Priority Applications (No Type Date): GB 200021444 A 20000831
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200219069	A2	E	42	G06F-001/00	

Designated States (National): AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

GB 2366706	A		G06F-017/60	
AU 200182359	A		G06F-001/00	Based on patent WO 200219069
EP 1368719	A2	E	G06F-001/00	Based on patent WO 200219069

Designated States (Regional): AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

Abstract (Basic): WO 200219069 A2

NOVELTY - Each mail includes header information including subject and non-subject headers and a main body containing message content. A numerical summary is formed only of the subject line and message content, which may include text or attached files. The generated numerical summary is stored and compared with previously stored summaries.

DETAILED DESCRIPTION - If the number of matches exceeds a **threshold** an alert is generated, e.g. to indicate detection of a virus or **Spam** . Timestamp information may be stored with the summaries together with sender/recipient details and the Internet protocol address of origin to aid in detecting the originator.

INDEPENDENT CLAIMS are included for

(a) a software product for monitoring **electronic mail**

(b) and a computer system for monitoring **electronic mail**

USE - Monitoring **electronic mail** , e.g. to detect malicious content such as viruses or **Spam** .

ADVANTAGE - Efficiently monitors for unsolicited and malicious mail.

pp; 42 DwgNo 0/3

Title Terms: METHOD; MONITOR; ELECTRONIC; MAIL; MESSAGE; GENERATE; MESSAGE; NUMBER; REPRESENT; PART; MESSAGE; NON; SUBJECT; HEADER; INFORMATION; COMPARE; NUMBER; STORAGE; NUMBER
Derwent Class: T01
International Patent Class (Main): G06F-001/00; G06F-017/60
File Segment: EPI

```
Set     Items   Description
S1      83541   EMAIL OR (ELECTRONIC OR E OR ELECTRIC OR DIGITAL)()(MAIL? -
             OR MESSAG?) OR SMTP OR MIME OR POP
S2    3788810   (MAX OR MAXIMUM OR THRESHOLD OR MOST)(2N)(NUMBER? OR AMOUN-
             T?) OR QUOTA OR LIMIT OR THRESHOLD OR MOST
S3       2900   SPAM OR ANTISPAM OR BULK(2N)(REMAIL? OR MAIL?)
S4       6613   S1 AND S2
S5         88   S4 AND S3
S6        322   S4 AND ((EMAIL OR MAIL)()SERVER? OR SENDER? OR ISP OR SERV-
             ICE()PROVIDER?)
S7         25   S5 AND S6
S8         24   RD (unique items)
S9         13   S8 NOT PY>2000
S10      2923   UNSOLICIT?(N)(MAIL? OR EMAIL?) OR S3
S11        11   S1(2N)S2 AND S10
S12        32   S1(2N)S2 AND S6
S13        40   S11 OR S12
S14        40   RD (unique items)
S15       594   S3 AND (FILTER? OR RULE?)
S16        48   S15 AND S2
S17        28   S16 AND (ADDRESS? OR INDIVIDUAL? OR SENDER? OR PERSON? OR -
             USER? OR SUBSCRIBER? OR CLIENT?)
S18        65   S14 OR S17
S19        61   S18 NOT S9
S20        61   RD (unique items)
S21        35   S20 NOT PY>2000
S22     24766   (LEVEL? OR QUANTIT? OR NUMBER? OR MAXIMUM? OR LIMIT? OR TH-
             RESHOLD?)(2N)(ADDRESS? OR FORWARD? OR RECIPIENT? OR RECEIVER?)
S23       312   S1 AND S22
S24         6   S23 AND (BULK? OR SPAM? OR REMAIL?)
S25        18   S23 AND (SERVER? OR GATEWAY? OR ISP? OR SERVICE()PROVIDER?)
S26        24   S24 OR S25
S27        24   RD (unique items)
S28        24   S27 NOT (S20 OR S9)
S29        21   S28 NOT PY>2000
File   8:Ei Compendex(R) 1970-2004/Feb W5
         (c) 2004 Elsevier Eng.  Info. Inc.
File  35:Dissertation Abs Online 1861-2004/Feb
         (c) 2004 ProQuest Info&Learning
File 202:Info. Sci. & Tech. Abs. 1966-2004/Feb 27
         (c) 2004 EBSCO Publishing
File  65:Inside Conferences 1993-2004/Mar W1
         (c) 2004 BLDSC all rts. reserv.
File   2:INSPEC 1969-2004/Feb W5
         (c) 2004 Institution of Electrical Engineers
File  94:JICST-EPlus 1985-2004/Feb W5
         (c)2004 Japan Science and Tech Corp(JST)
File 111:TGG Natl.Newspaper Index(SM) 1979-2004/Mar 11
         (c) 2004 The Gale Group
File 233:Internet & Personal Comp. Abs. 1981-2003/Sep
         (c) 2003 EBSCO Pub.
File   6:NTIS 1964-2004/Mar W1
         (c) 2004 NTIS, Intl Cpyrght All Rights Res
File 144:Pascal 1973-2004/Feb W5
         (c) 2004 INIST/CNRS
File  34:SciSearch(R) Cited Ref Sci 1990-2004/Mar W1
         (c) 2004 Inst for Sci Info
File  99:Wilson Appl. Sci & Tech Abs 1983-2004/Feb
         (c) 2004 The HW Wilson Co.
File  95:TEME-Technology & Management 1989-2004/Feb W4
         (c) 2004 FIZ TECHNIK
```

9/5/3 (Item 3 from file: 2)
DIALOG(R)File 2:INSPEC

5823086 INSPEC Abstract Number: B9803-6210G-006, C9803-6155-003
Title: Selectively rejecting spam **using Sendmail**
Author(s): Harker, R.
Conference Title: Proceedings of the Eleventh Systems Administration Conference (LISA XI) p.205-20
Publisher: USENIX Assoc, Berkeley, CA, USA
Publication Date: 1997 Country of Publication: USA vi+226 pp.
ISBN: 1 880446 90 1 Material Identity Number: XX98-00067
Conference Title: Proceedings of the Eleventh Systems Administration Conference (LISA XI)
Conference Sponsor: USENIX Assoc
Conference Date: 26-31 Oct. 1997 Conference Location: San Diego, CA, USA
Language: English Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: With the growing popularity of the Internet, unsolicited **electronic mail** (**spam**) has become a major concern. It fills up user's mailboxes, clogs mail relays, wastes the postmaster's time and creates ill will for sites that have been used as a relay. **Most** sites want to filter **spam** before they receive it, but filtering **spam** is hard to do without filtering legitimate mail messages. This paper discusses what characterizes **spam** and describes rulesets that can be added to a Sendmail version 8.8 sendmail.cf file to selectively reject mail from specific addresses, domains or IP addresses and to prevent spammers from relaying mail through a site. It discusses the different issues facing corporate sites and the special issues facing Internet **service providers** (ISPs). The rulesets presented have been implemented as M4 template files so they can be easily integrated into a sendmail.cf file as a feature using M4. These rulesets are currently in use at Harker Systems and other sites, and are available via anonymous ftp. (4 Refs)
Subfile: B C
Descriptors: **electronic mail** ; Internet
Identifiers: selective **spam** rejection; Sendmail v. 8.8; M4 template files; unsolicited **electronic mail** ; spamming; mail relays; message filtering; IP addresses; corporate sites; Internet **service providers** ; rulesets
Class Codes: B6210G (Electronic mail); B6210L (Computer communications); C6155 (Computer communications software); C7104 (Office automation); C7210 (Information services and centres)

9/5/9 (Item 6 from file: 233)
DIALOG(R)File 233:Internet & Personal Comp. Abs.

00525763 99IE02-023
For many ISPs, spam 's complexities create an intractable problem
Dillon, Michael
Internet World , February 1, 1999 , v5 n4 p27, 1 Page(s)
ISSN: 1081-3071
Languages: English
Document Type: Articles, News & Columns
Geographic Location: United States
ASK THE INFRA EXPERT column explains how criminal spammers use forged source addresses to help cover their tracks. Says that a fake credit card number is used to open accounts with national Internet **service providers** (ISPs) that offer service through modem pools that they rent from other providers. Adds that an **ISP** is then dialed up, and special software is used to send out tens of thousands of **spam** messages with forged **e - mail** addresses comprised of random letters for the user name, and a real domain name. Notes that as the spammer's account is terminated with one dial-up provider, the spammer simply moves on to the next dial-up provider and continues spamming. Says that **most** ISPs reject **spam** messages by bouncing them back to the **sender** . Adds that when the **sender** 's domain name was forged, some innocent victim not connected with the spammer must spend several days deleting tens of thousands of bounced messages. (JC)
Descriptors: Spamming; Problem-solving; Internet **Service Providers** ; Internet Access; Crime

29/5/2 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC

6028452 INSPEC Abstract Number: C9811-0230-002
Title: Spam ! **[junk** e - mail **]**
Author(s): Cranor, L.F.; LaMacchia, B.A.
Author Affiliation: AT&T Labs.-Res., Florham Park, NJ, USA
Journal: Communications of the ACM vol.41, no.8 p.74-83
Publisher: ACM,
Publication Date: Aug. 1998 Country of Publication: USA
CODEN: CACMA2 ISSN: 0001-0782
SICI: 0001-0782(199808)41:8L.74:SJM;1-D
Material Identity Number: C056-98009
U.S. Copyright Clearance Center Code: 0001-0782/98/0800$5.00
Language: English Document Type: Journal Paper (JP)
Treatment: General, Review (G)
Abstract: Concern about the proliferation of unsolicited **bulk email** , commonly referred to as " **spam** ", has been steadily increasing. When received in small quantities, **spam** may annoy recipients, but rarely poses a significant problem. However, some **recipients** of large **quantities** of **spam** find themselves so overwhelmed with unwanted **email** that it is time-consuming or difficult for them to ferret out their desired correspondence. Furthermore, unlike most junk postal mail, junk **email** frequently contains explicit sexual language and attached photographs that many recipients find offensive. With the advent of HTML-enabled **email** clients, some **bulk** emailers now send lengthy HTML-formatted **email** , complete with images and links to Java applets that may execute automatically when the **email** is read using some clients. The paper discusses possible solutions to the **spam** problem and the major factors that contribute to it. (7 Refs)
Subfile: C
Descriptors: **electronic mail** ; Internet; social aspects of automation
Identifiers: unsolicited **bulk email** ; **spam** ; junk **e - mail** ; HTML; Java applets; unwanted **electronic mail** ; Internet
Class Codes: C0230 (Economic, social and political aspects of computing) ; C7104 (Office automation); C7210 (Information services and centres)

29/5/5 (Item 1 from file: 233)

00605107 00KM06-001

Delving deep into e - mail

KM World , June 1, 2000 , v9 n5 p1, 21, 2 Page(s)
ISSN: 1060-894X
Company Name: Tacit Knowledge Systems
URL: http://www.tacit.com
Product Name: KnowledgeMail 1.3
Languages: English
Document Type: Articles, News & Columns
Geographic Location: United States

Reports that KnowledgeMail 1.3 from Tacit Knowledge Systems can now be accessed from an intranet or portal. States that content can be viewed and acted on in context with other applications or directories. Says that under the control of each individual user, KnowledgeMail automatically creates private and public profiles of everyone in the enterprise and maintains them in real time. Adds that the system makes that information accessible across the enterprise thereby linking information seekers with knowledge holders on any given topic. Indicates that with the new software, distribution lists can be expanded so they can more effectively target the appropriate recipients instead of distributing **e - mail** to those who would have no interest. Says that by limiting the **number** of **recipients** by data fields in an LDAP **server** , the overall performance of the system can be increased. (sps)

Descriptors: **Electronic Mail** ; Administration; Intranets; Networks ; Portals
Identifiers: KnowledgeMail 1.3; Tacit Knowledge Systems